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FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			PATEL, DHAIRYA A	
			ART UNIT	PAPER NUMBER
			2151	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/664,550

Applicant(s)

HUANG, HUNG

Examiner

Dhairya A. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is responsive to the interview examiner had with Mr. Michael O'Neill (Reg. # 32,622) on May 16, 2006, in regards to the IDS. Examiner had made the previous office action final rejection mailed 5/3/2006 using the IDS submitted by the applicant. Examiner realized the previous office action was made final rejection improperly; therefore examiner has reopened the prosecution, and therefore made this office action non-final rejection.

2. Applicant's arguments with respect to claim 1-32 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13-15 recites the limitation "the interface module" in line 1. There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11,13-18,22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagidaira et al. U.S. Patent # 6,490,052 (hereinafter Yanagidaira) in view of Alexander et al. U.K. Patent Application # GB 2,347,766 (hereinafter Alexander).

As per claim 1, Yanagidaira teaches a method for supporting printer maintenance in a network environment having a server, at least one network device and a printer, the server containing a plurality of printer configuration files, said method comprising the steps of:

-accessing one of the printer configuration files which corresponds to the printer, the configuration file including a plurality of printer maintenance function names and a plurality of printer maintenance commands corresponding to the printer maintenance function names (column 6 lines 8-17)(column 5 lines 29-35);

The reference teaches accessing printer information database and language monitors (printer configuration files) which corresponds each printers, and the printer records database and language monitors containing operation mode, power saving, setting of paper feed (printer maintenance function names) and setting states information commands, operating setting state commands (printer maintenance commands) corresponding to the printer maintenance function names.

Yanagidaira fails to teach generating an HTML-based page corresponding to the printer, the HTML-based page containing each of the printer maintenance function names from the accessed printer configuration file.

Alexander teaches generating an HTML-based page corresponding to the printer, the HTML-based page containing each of the printer maintenance function names from the accessed printer configuration file (Page 2 lines 35-45)(Page 3 lines 1-15), sending the HTML-based page to the network device (Page 2 lines 35-45)(Page 3 lines 1-15),

Alexander teaches generating a webpage (HTML-based page) corresponding to the printer, the webpage containing what protocol printer using, driver required (printer maintenance function) from the .alx file (accessed printer configuration file). It is also teaches sending the webpage to the client's computer which is on the network (network device)(column 2 lines 35-45).

wherein, upon selection in the network device of one of the printer maintenance function names in the HTML-based page, the server sends to the printer the printer maintenance command which corresponds to the selected printer maintenance function name (Page 3 lines 1-45).

Alexander teaches selecting one of the printer and selecting printer drivers or what protocol the printer uses (printer maintenance function names from the webpage), and sending to the printer, making direct API calls to for installing a protocol or printer driver (maintenance command corresponding to the selected printer maintenance function name).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement Alexander's teaching in Yanagidaira's teaching to come up with generating a html-based page corresponding to printer, and

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page containing printer maintenance function names and configuration file. The motivation for doing so is so the user can select from the HTML-based page any maintenance function names/commands corresponding to printer instead of searching for the function names or entering the commands (Page 2).

As per claim 2, Yanagidaira and Alexander teaches a method according to claim 1, but Yanagidaira further teaches further including the step of receiving a printer maintenance request from the network device, the printer maintenance request containing a reference to the printer (column 5 lines 43-67)(column 6 lines 5-10).

As per claim 3, Yanagidaira and Alexander teaches a method according to claim 2, but Yanagidaira further teaches wherein the accessing step is performed in response to receipt of the printer maintenance request (column 6 lines 8-15).

As per claim 4, Yanagidaira and Alexander teaches a method according to claim 1, but Yanagidaira further teaches wherein each of the printer configuration files has a standardized data format (column 6 lines 11-15).

The reference teaches having a printer information database and in a database all data is stored in same data structure.

As per claim 5, Yanagidaira and Alexander teaches a method according to claim 4, but Yanagidaira further teaches wherein the standardized data format is an industry standard format (column 5 lines 20-22)(column 6 lines 11-15).

The reference teaches states which are commonly used in the industry

As per claim 6, Yanagidaira teaches a method of claim 4, wherein the standardized data format includes an industry standard format and an extension to the industry standard format (column 5 lines 20-22)(column 6 lines 11-15).

As per claim 7, Yanagidaira and Alexander teaches a method of claim 1, but Yanagidaira further teaches wherein each of the printer configuration files includes a plurality of printer maintenance function data sets, wherein each printer maintenance function data set includes a printer maintenance function name, a printer maintenance function description, a printer maintenance function resource and a printer maintenance command parameter (column 5 lines 20-36).

As per claim 8, Yanagidaira and Alexander teaches a method according to claim 7, but Alexander further teaches wherein the printer maintenance function resource is a file containing image data for incorporation into HTML-based page (Page 4 lines 5-20).

As per claim 9, Yanagidaira and Alexander teaches a method according to claim 8, but Yanagidaira further teaches wherein the image data in the file represents the printer maintenance function name corresponding to the printer maintenance function resource(Page 2 lines 35-45)(Page 3 lines 1-15).

As per claim 10, Yanagidaira and Alexander teaches a method according to claim 7, but Yanagidaira further teaches wherein the printer maintenance function command parameter is a printer maintenance function command which is identified by the printer maintenance function name corresponding to the printer maintenance function command parameter (column 5 lines 20-25, 30-35).

As per claim 11, Yanagidaira and Alexander teaches a method according to claim 7, but Yanagidaira further teaches wherein the printer maintenance function command parameter represents a command file containing a printer maintenance function command which is identified by the printer maintenance function name corresponding to the printer maintenance function command parameter (column 6 lines 19-29).

As per claim 13, Yanagidaira and Alexander teaches a method according to claim 1, but Alexander further teaches wherein the interface module is a standardized software module for building an HTML-based page (Page 1 lines 42-46)(Page 2 lines 1-23).

As per claim 14, Yanagidaira and Alexander teaches a method according to claim 13, but Alexander further teaches, wherein the interface module is provided by the operating system of the server (Page 2 lines 18-30).

As per claim 15, Yanagidaira and Alexander teaches a method according to claim 1, but Alexander further teaches wherein the interface module is a common gateway interface module (Page 1 lines 42-46)(Page 2 lines 1-17).

As per claim 16, Yanagidaira and Alexander teaches a method according to claim 1, but Yanagidaira further teaches wherein the selection by the network device of one of the printer maintenance function names is performed by a user of the network device (column 5 lines 43-46, 56-60).

As per claim 17, Yanagidaira and Alexander teaches a method according to claim 1, but Yanagidaira further teaches, wherein the user of the network device selects



one of the printer maintenance functions names by using a pointing device connected to the network device (column 5 lines 56-60).

As per claim 18, Yanagidaira and Alexander teaches a method according to claim 1, but Yanagidaira further teaches, wherein the method is performed in the server (figure 1; column 5 lines 29-41).

The reference all of the functions takes place in the printer server of the reference.

As per claim 22, Yanagidaira and Alexander teaches a method according to claim 1, but Yanagidaira further teaches, wherein the server executes a script to end the printer maintenance command to the printer (column 7 lines 21-32).

As per claim 23, Yanagidaira and Alexander teaches a method according to claim 22, but Alexander further teaches wherein the script is a common gateway interface script (Page 1 lines 42-46)(column 2 lines 1-17).

As per claim 24, Yanagidaira teaches a method for supporting printer maintenance in a network environment having a server, at least one network device and a printer, the server containing a plurality of printer configuration files, said method comprising the steps of:

- receiving a printer maintenance request from one of the network devices, the printer maintenance request containing a reference to the printer (column 5 lines 29-35, lines 55-60).

- accessing one of the printer configuration files which corresponds to the printer, the printer configuration files having a standardized data format and including a plurality

of printer maintenance function data sets each of which includes a printer maintenance function name, a printer maintenance function description, a printer maintenance function resource and a printer maintenance function command parameter (column 6 lines 8-17)(column 5 lines 29-35);

The reference teaches accessing printer information database and language monitors (printer configuration files) which corresponds each printers, and the printer records database and language monitors containing operation mode, power saving, setting of paper feed (printer maintenance function names) and setting states information commands, operating setting state commands (printer maintenance commands) corresponding to the printer maintenance function names.

Yanagidaira fails to teach generating, by use of an interface module in the server, an HTML-based page corresponding to the printer, the HTML-based page containing for each printer maintenance function data set the corresponding printer maintenance function name, printer maintenance function description, and the printer maintenance function resource, sending the HTML-based page to the network device that sent the printer maintenance request wherein, upon selection by the network device of one of the printer maintenance function names in the HTML-based page, the server sends to the printer a printer maintenance function command which is derived from the printer maintenance function command parameter corresponding to the selected printer maintenance function name.

Alexander teaches generating, by use of an interface module in the server, an HTML-based page corresponding to the printer, the HTML-based page containing for

each printer maintenance function data set the corresponding printer maintenance function name, printer maintenance function description, and the printer maintenance function resource. (Page 2 lines 35-45)(Page 3 lines 1-15), sending the HTML-based page to the network device that sent the printer maintenance request (Page 2 lines 35-45)(Page 3 lines 1-15).

Alexander teaches generating a webpage (HTML-based page) corresponding to the printer, the webpage containing what protocol printer using, driver required (printer maintenance function) from the .alx file (accessed printer configuration file). It is also teaches sending the webpage to the client's computer which is on the network (network device)(column 2 lines 35-45).

-wherein, upon selection by the network device of one of the printer maintenance function names in the HTML-based page, the server sends to the printer a printer maintenance function command which is derived from the printer maintenance function command parameter corresponding to the selected printer maintenance function name (Page 3 lines 1-45).

Alexander teaches selecting one of the printer and selecting printer drivers or what protocol the printer uses (printer maintenance function names from the webpage), and sending to the printer, making direct API calls to for installing a protocol or printer driver (maintenance command corresponding to the selected printer maintenance function name).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement Alexander's teaching in Yanagidaira's

teaching to come up with generating a html-based page corresponding to printer, and page containing printer maintenance function names and configuration file. The motivation for doing so would be so the user can select from the HTML-based page any maintenance function names/commands corresponding to printer instead of searching for the function names or entering the commands (Page 2).

4. Claims 19-21,25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagidaira et al. U.S. Patent # 6,490,052 (hereinafter Yanagidaira) in view of Alexander in further view of Lauder et al. U.S. Patent # 6,253,238 (hereinafter Lauder).

As per claim 19, Yanagidaira and Alexander teaches a method according to claim 1, but fails to teach wherein the network environment is a digital cable network. Lauder teaches the network environment is a digital cable network (Figure 4, column 6 lines 53-58). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to modifying Yanagidaira's invention to employ the use of a digital cable network. This benefits the system by allowing a large number of users on smaller home networks to a service network printers.

As per claim 20, Yanagidaira, Alexander and Lauder teach a method according to claim 19, but Yanagidaira and Alexander fails to teach wherein the network device is a set top box. Lauder teaches the network device is a set top box (figure 4, column 6 lines 53-58). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to modifying Yanagidaira's invention to employ the use of a set top box. The motivation for doing so would have been so that this would allow a

larger number of users on a smaller home networks to service network printers using hardware already installed in the home.

As per claim 21, Yanagidaira, Alexander and Lauder teaches a method according to claim 19, but Yanagidaira and Alexander fails to teach wherein the method is performed in the server which is located in a cable head end of the digital cable network. Lauder teaches the method is performed in the server, which is located in a cable head end of the digital cable network (figure 4, column 6 lines 53-58). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to modifying Yanagidaira's invention to implement the method is performed in the server which is located in a cable head end of the digital cable network. The motivation for doing so would have been so that this would allow the server to run on a piece of hardware already functioning in the desired location.

As per claim 25, Yanagidaira and Alexander teaches a network server for supporting printer maintenance in a network environment having at least one network device and a printer, the server containing a plurality of printer configuration files, comprising: a program memory for storing process steps executable to perform a method according to any of claims 1 to 24 (Yanagidaira's figure 1); and a processor for executing the process steps stored in said program memory (Yanagidaira's figure 1).

As per claim 26, Yanagidaira and Alexander teaches computer-executable process steps stored on a computer readable medium, said computer-executable process steps to support printer maintenance in a network environment having a server, at least one network device and a printer, the server containing a plurality of printer

configuration files, said computer-executable process steps comprising process steps executable to perform a method according to any of claims 1 to 24 (column 6 lines 8-28, column 7 lines 21-32)(Fig. 1).

As per claim 27, Yanagidaira and Alexander teaches a computer-readable medium which stores computer-executable process steps stored on a computer readable medium, said computer-executable process steps to support printer maintenance in a network environment having a server, at least one network device and a printer, the server containing a plurality of printer configuration files, said computer-executable process steps comprising process steps executable to perform a method according to any of claims 1 to 24 (column 6 lines 8-28, column 7 lines 21-32)(Fig. 1).

***Claim Rejections - 35 USC § 102***

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 28-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Alexander et al. U.K. Patent Application # GB 2,347,766 (hereinafter Alexander).

As per claim 28, Alexander teaches printer maintenance method in a network environment having a server and at least one network device to which a printer is connected said method comprising the steps of:

- sending from the server to the network device display data containing at least one printer maintenance function identification (Page 2 lines 35-45)(Page 3 lines 1-15)(Page 5 lines 28-46)(Page 6 lines 1-4),

- receiving in the server a selection from the network display device of a printer maintenance function identification (Page 2 lines 35-45)(Page 3 lines 1-15)(Page 5 lines 20-46)(Page 6 lines 1-4);and

- sending from the server to the printer connected to the network device a printer maintenance command corresponding to the printer maintenance function identification selected in the network display device (Page 2 lines 35-45)(Page 3 lines 1-45)(Page 5 lines 20-46)(Page 1-4),.

As per claim 29, Alexander teaches a method according to claim 28, wherein said sending step for the display data containing at least one printer maintenance function identification corresponding to the printer connected to the network device (Page 5 lines 20-40)

As per claim 30, Alexander teaches a method according to claim 28, wherein said server sends the printer maintenance command corresponding to the printer maintenance function identification selected in the network device and corresponding to the printer connected to the network device (Page 5 lines 20-40).

As per claim 31, Alexander teaches a network server for printer maintenance in a network environment having at least one network device to which a printer is connected, comprising:

-a program memory for storing process steps executable to perform a method according to claim 28; and a processor for executing the process steps stored in said program memory (Page 8)(Page 1)(Page 2).

As per claim 32, Alexander teaches a computer-executable process steps stored on a computer readable medium, said computer-executable process steps for printer maintenance in a network environment having a server and at least one network device to which a printer is connected, said computer-executable process steps comprising process steps executable to perform a method according to claim 28 (Page 1)(Page 2)(Fig.1)

#### ***Allowable Subject Matter***

6. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

7. Applicant's arguments with respect to claim 1-28 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.



9. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the applicant (see 35 U.S.C 133, M.P.E.P 710.02, 710.02(b)).

10.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dhairya A. Patel whose telephone number is 571-272-5809. The examiner can normally be reached on 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAP

  
**ZARNI MAUNG**  
**SUPERVISORY PATENT EXAMINER**